



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/572,654

03/20/2006

Hiroyuki Tsukashima

127412

4516

25944 7590 06/06/2007
OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

JACOBS, DUSTIN THOMAS

ART UNIT

PAPER NUMBER

2834

MAIL DATE

DELIVERY MODE

06/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/572,654

Applicant(s)

TSUKASHIMA ET AL.

Examiner

Dustin Jacobs

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 03/20/2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. JP 2004-037104, filed on 02/13/2004.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 03/20/2006 was filed on the same mailing date of the application, 10/572654 on 03/20/2006. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuzawa et al. (US Publication 2002/00507052) in view of Takao (Japanese Publication No. 06-121496).
Katsuzawa et al. '052 discloses:

Art Unit: 2834

- A motor module (1, Fig. 1) supplied with electric power from an external wiring (70, Fig. 2) having a motor winding (2, Fig. 1) and a terminal block (10, Fig. 1) electrically connecting said motor winding to said external wiring.
- The terminal block (10, Fig. 1) having a first contact (23, Fig. 1) electrically connecting an internal conductor (23, Fig. 1) and the external wiring (70, Fig. 2).
- A second contact (21, Fig. 1) electrically connecting said internal conductor to the motor winding (2, Fig. 2).
- The motor winding (2, Fig. 1) is connected to the internal conductor (23, Fig. 1) via a flexible member (7, Fig. 1) that is conductive.

Katsuzawa et al. '052 does not disclose:

- The motor winding being subjected to varnish treatment.
- The flexible member being higher in flexibility than the motor winding.

Takao '496 discloses:

- The motor winding (3, Drawing 2) being subjected to varnish treatment (par. 20, lines 4-5).
- The motor winding (3, Drawing 2) being stiffened and hardened (par. 20, lines 4-5). Thus, the flexible member of Katsuzawa et al. '052 is higher in flexibility than the motor coils of Shigemi '301.

The advantage of Takao '496 is to prevent excess varnish around the coils (abstract, lines 2-6; par. 21, lines 6-10) while impregnating the coils with varnish.

Takao '496 teaches that it is known to provide a motor winding (3, Drawing 2) being subjected to varnish treatment (par. 20, lines 4-5) and also have the motor

Art Unit: 2834

winding (3, Drawing 2) being stiffened and hardened (par. 20, lines 4-5). Thus, the flexible member of Katsuzawa et al. '052 is higher in flexibility than the motor coils of Takao '496. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a motor winding (3, Drawing 2) being subjected to varnish treatment (par. 20, lines 4-5) and also have the motor winding (3, Drawing 2) being stiffened and hardened (par. 20, lines 4-5). as taught by Takao '496, since Takao '496 states that such a modification would prevent excess varnish around the coils (abstract, lines 2-6; par. 21, lines 6-10) while impregnating the coils with varnish.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuzawa et al. '052 in view of Takao '496 as applied to claim 1 above, and further in view of Manel et al. (US Patent No. 5,465,016).

Katsuzawa et al. '052 in view of Takao '496 does not disclose:

- The flexible member being a braided wire.

Manel et al. '016 discloses;

- The flexible member (36, Fig. 3) being a braided wire (col. 5, lines 14-15).

The advantage of Mane et al. '016 is to provide completion of the series connection to from the power supply to the armature coils (col. 5, lines 4-7).

Manel et al. '016 teaches that it is known to (?). It would have been obvious to one having ordinary skill in the art at the time the invention was made to (?) as taught by Manel et al. '016, since Manel et al. '016 states that such a modification would provide

Art Unit: 2834

completion of the series connection to from the power supply to the armature coils (col. 5, lines 4-7).

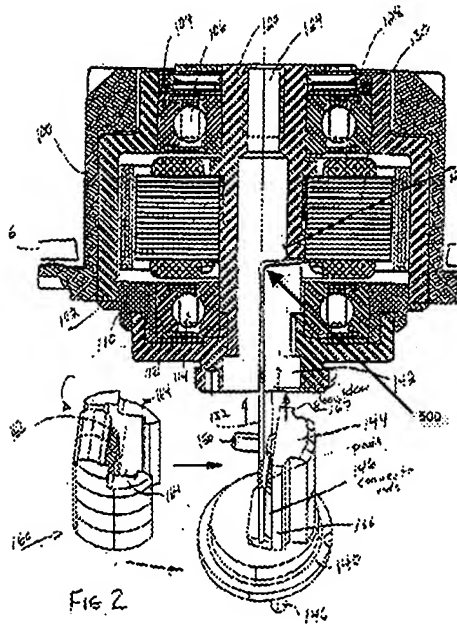
6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuzawa et al. '052 in view of Takao '496 as applied to claim 1 above, and further in view of Kloeppel et al. (US Publication 2002/0047363).

Katsuzawa et al. '052 in view of Takao '496 does not disclose:

- The flexible member being a plate-'like conductor having an elastically deformable portion.

Kloeppel et al. '363 discloses:

- The flexible member (132, Fig. 2 and Fig. 3a) being a plate-like conductor having an elastically deformable portion (500, edited Fig. 2).



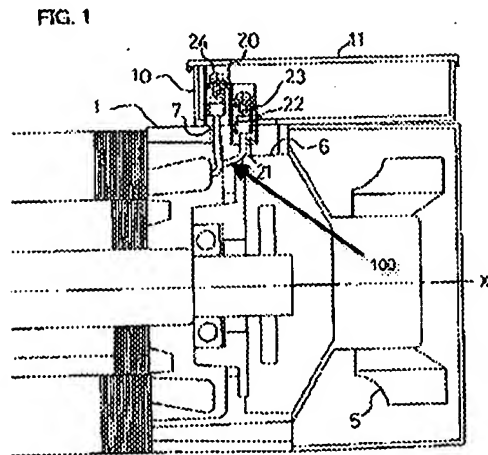
The advantage of Kloeppel et al. '363 is to provide a connection between external power sources to the stator coils (par. 21, lines 9-11).

Kloeppel et al. '363 teaches that it is known to provide a flexible member (132, Fig. 2 and Fig. 3a) being a plate-like conductor having an elastically deformable portion (500, edited Fig. 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a flexible member (132, Fig. 2 and Fig. 3a) being a plate-like conductor having an elastically deformable portion (500, edited Fig. 2) as taught by Kloeppel et al. '363, since Kloeppel et al. '363 states that such a modification would provide a connection between external power sources to the stator coils (par. 21, lines 9-11).

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuzawa et al. '052 in view of Takao '496 as applied to claim 1 above, and further in view of Kobayashi et al. (US Publication No. 2003/0024749).

Katsuzawa et al. '052 in view of Takao '496 discloses:

- The motor winding (2, Fig. 1) is attached to said second contact in the rotation shaft direction (edited. Fig. 1) of the motor.



Kobayashi et al. '749 discloses:

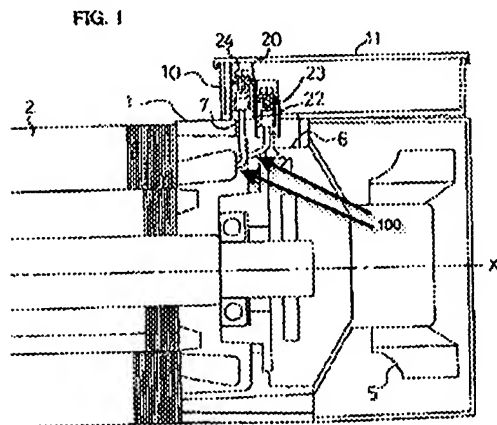
- The first contact (88a-88c, Fig. 7) has a structure where the internal conductor (88a-88c, Fig. 7) and the external wiring (92a-92c, Fig. 7) are allowed to mate with each other in a perpendicular direction to the rotation shaft of the motor.

The advantage of Kobayashi et al. '749 is to provide an electrical connection from the power source terminals to the stator (par. 36, lines 11-16).

Kobayashi et al. '749 teaches that it is known to provide a first contact (88a-88c, Fig. 7) has a structure where the internal conductor (88a-88c, Fig. 7) and the external wiring (92a-92c, Fig. 7) are allowed to mate with each other in a perpendicular direction to the rotation shaft of the motor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a first contact (88a-88c, Fig. 7) has a structure where the internal conductor (88a-88c, Fig. 7) and the external wiring (92a-92c, Fig. 7) are allowed to mate with each other in a perpendicular direction to the rotation shaft of the motor as taught by Kobayashi et al. '749, since Kobayashi et al.

'749 states that such a modification would provide an electrical connection from the power source terminals to the stator (par. 36, lines 11-16).

In re claim 5, Katsuzawa et al. '752 discloses a plate-like terminal (21, Fig. 5e) attached to a tip of the flexible member (7, Fig. 5e) and a fixing member (24, Fig. 5d) fastening said terminal and the internal conductor (par. 35, lines 3-7) to each other and thereby electrically connecting them, and wherein said terminal is fastened to said internal conductor by said fixing member in a state where said flexible member is deformed (100, edited Fig. 1) such that said terminal is positioned along said perpendicular direction.



8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuzawa et al. '052 in view of Takao '496 and Manel et al. '016 as applied to claim 2 above, and further in view of Kobayashi et al. '749.

Katsuzawa et al. '052 in view of Takao '496 and Manel et al. '016 discloses:

Art Unit: 2834

- The motor winding (2, Fig. 1) is attached to said second contact in the rotation shaft direction (edited. Fig. 1 of Katsuzawa et al. '052) of the motor.

Kobayashi et al. '749 discloses:

- The first contact (88a-88c, Fig. 7) has a structure where the internal conductor (88a-88c, Fig. 7) and the external wiring (92a-92c, Fig. 7) are allowed to mate with each other in a perpendicular direction to the rotation shaft of the motor.

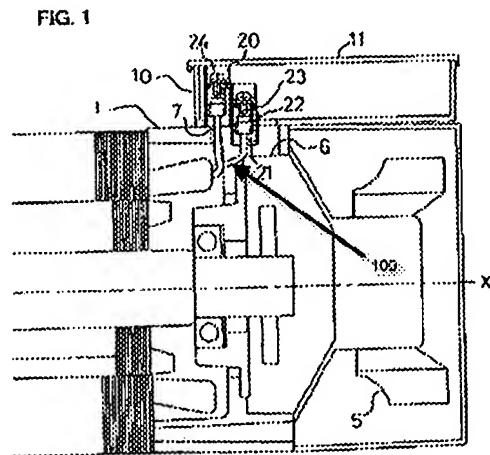
The advantage of Kobayashi et al. '749 is to provide an electrical connection from the power source terminals to the stator (par. 36, lines 11-16).

Kobayashi et al. '749 teaches that it is known to provide a first contact (88a-88c, Fig. 7) has a structure where the internal conductor (88a-88c, Fig. 7) and the external wiring (92a-92c, Fig. 7) are allowed to mate with each other in a perpendicular direction to the rotation shaft of the motor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a first contact (88a-88c, Fig. 7) has a structure where the internal conductor (88a-88c, Fig. 7) and the external wiring (92a-92c, Fig. 7) are allowed to mate with each other in a perpendicular direction to the rotation shaft of the motor as taught by Kobayashi et al. '749, since Kobayashi et al. '749 states that such a modification would provide an electrical connection from the power source terminals to the stator (par. 36, lines 11-16).

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuzawa et al. '052 in view of Takao '496 and Kloeppel et al. '363 as applied to claim 3 above, and further in view of Kobayashi et al. '749.

Katsuzawa et al. '052 in view of Takao '496 and Kloeppel et al. '363 discloses:

- The motor winding (2, Fig. 1) is attached to said second contact in the rotation shaft direction (edited. Fig. 1 of Katsuzawa et al. '052) of the motor.



Kobayashi et al. '749 discloses:

- The first contact (88a-88c, Fig. 7) has a structure where the internal conductor (88a-88c, Fig. 7) and the external wiring (92a-92c, Fig. 7) are allowed to mate with each other in a perpendicular direction to the rotation shaft of the motor.

The advantage of Kobayashi et al. '749 is to provide an electrical connection from the power source terminals to the stator (par. 36, lines 11-16).

Kobayashi et al. '749 teaches that it is known to provide a first contact (88a-88c, Fig. 7) has a structure where the internal conductor (88a-88c, Fig. 7) and the external wiring (92a-92c, Fig. 7) are allowed to mate with each other in a perpendicular direction to the rotation shaft of the motor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a first contact (88a-88c, Fig. 7) has a structure where the internal conductor (88a-88c, Fig. 7) and the external wiring

Art Unit: 2834

(92a-92c, Fig. 7) are allowed to mate with each other in a perpendicular direction to the rotation shaft of the motor as taught by Kobayashi et al. '749, since Kobayashi et al. '749 states that such a modification would provide an electrical connection from the power source terminals to the stator (par. 36, lines 11-16).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yoshida et al. (US Publication No. 20070052307) discloses a motor module with a terminal block having a first contact and second contact to the motor winding with a fixing member. Kabasawa et al. (US Publication 20040070293) discloses a motor module with a first contact connecting a power supply to the second connect to the motor winding. Kimura et al. (US Publication 2030156954) discloses a motor module with a motor winding connected to external power source via an internal conductor. Futami et al. (US Publication No. 20030020344) discloses a braided wire being the flexible member. Shigemi (Japanese Publication 2002-078301) discloses the motor coils being varnish treated.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Jacobs whose telephone number is 571-270-1429. The examiner can normally be reached on M-Th, 7:30am-5:00pm est.; alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DJ

A handwritten signature in black ink, appearing to be 'DJ' or similar, located to the left of the official stamp.